WHAT IS CLAIMED IS:

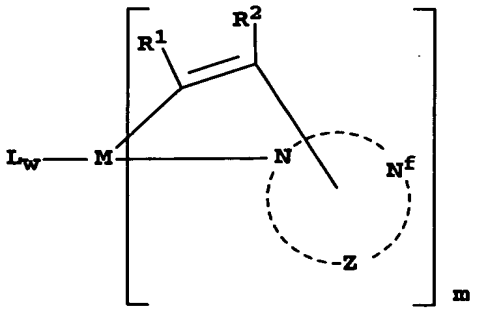
1. An electroluminescent device comprising a light-emitting layer including a light emitting material that contains an organometallic complex comprising (1) a metal selected from the group consisting of Ir, Rh, Os, Pt, and Pd and (2) a diazole group ligand wherein the ligand has a fused aromatic ring group including a nitrogen of the diazole as a bridgehead nitrogen.

2. The device of claim 1 wherein the metal is Ir.

3. The device of claim 1 wherein the diazole compound is further substituted with a substituent that has at least one double bond.

4. The device of claim 1 wherein the diazole compound is further substituted with a five or six-membered aromatic ring.

5. The device of claim 1 wherein the light emitting material is represented by Formula (1):



(1)

wherein:

Z represents the atoms necessary to form a diazole ring group that is fused with at least one aromatic ring group;

N^f represents a nitrogen atom at a bridgehead position between the diazole ring group and the fused aromatic ring group;

M is a coordinated metal selected from the group consisting of Ir, Rh, Os, Pt, and Pd;

m is 1, 2 or 3 when M is Ir or Rh and m is 1 or 2 when M is Pt, Pd, or Os;

L represents an independently selected ligand group;

w is 0- 4 as necessary in order to satisfy a 6 coordination sites when M is Ir, Rh, or Os, and w is 0- 2 as necessary in order to satisfy 4 coordination sites when M is Pt or Pd; and

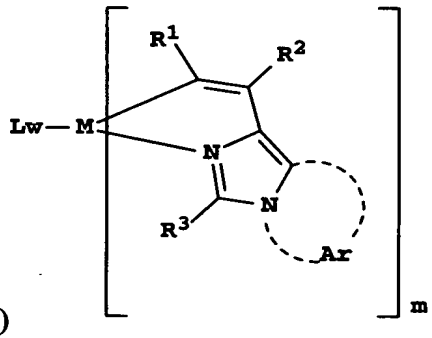
R^1 and R^2 represent substituent groups, provided that R^1 and R^2 may form a ring group.

6. The device of claim 5 wherein M is Ir.

7. The device of claim 6 wherein w is 0 and m is 3.

8. The device of claim 6 wherein R^1 and R^2 represent the atoms necessary to join to form a six-membered aromatic ring group.

9. The device of claim 5 wherein the light-emitting material is represented by Formula (1a):



(1a)

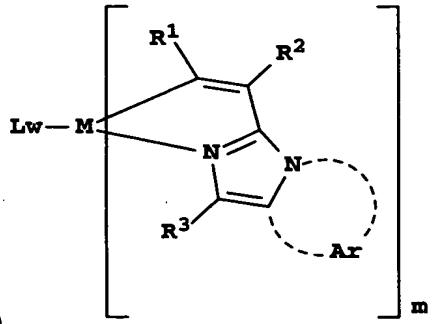
wherein:

M, L, w, m, R^1, and R^2 are as defined in claim 5;

R^3 represents hydrogen or a substituent; and

Ar represents the atoms necessary to form an aromatic ring group.

10. The device of claim 5 wherein the light-emitting material is represented by Formula (1b):



(1b)

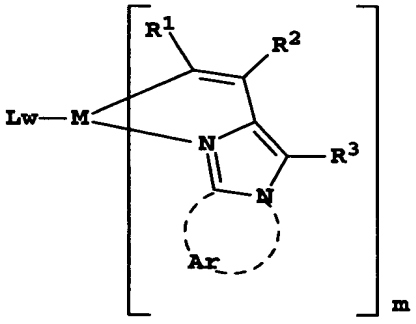
wherein:

M, L, w, m, R^1, and R^2 are as defined in claim 5;

R^3 represents hydrogen or a substituent; and

Ar represents the atoms necessary to form an aromatic ring group.

11. The device of claim 5 wherein the light-emitting layer contains a light emitting compound of Formula (1c):



(1c)

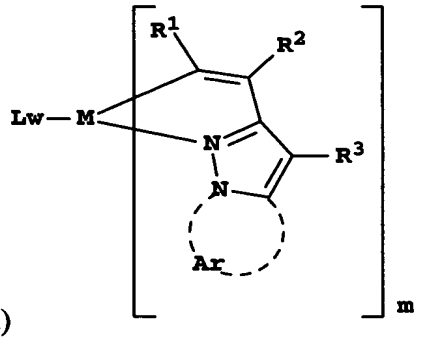
wherein:

M, L, w, m, R^1, R^2 are as defined in claim 5;

R^3 represents hydrogen or a substituent; and

Ar represents the atoms necessary to form an aromatic ring group.

12. The device of claim 5 wherein the light-emitting layer contains a light emitting compound of Formula (1d):



(1d)

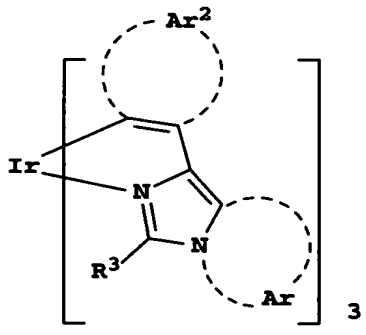
wherein:

M, L, w, m, R^1, R^2 are as defined in claim 5;

R^3 represents hydrogen or a substituent; and

Ar represents the atoms necessary to form an aromatic ring group.

13. The device of claim 5 wherein the light-emitting material is represented by Formula (1e):



(1e)

wherein:

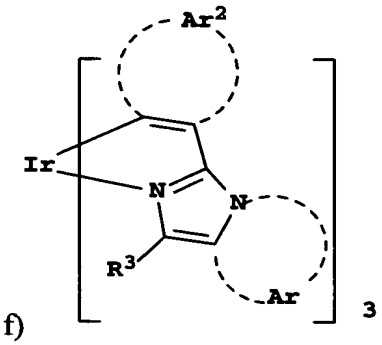
Ar represents the atoms necessary to form an aromatic ring group;

R^3 represents hydrogen or a substituent; and

Ar^2 represents the atoms necessary to form a five or six membered aromatic ring group.

14. The device of claim 13 wherein Ar and Ar^2 independently represent the atoms necessary to form a benzene ring group.

15. The device of claim 5 wherein the light-emitting material is represented by Formula (1f)



(1f)

wherein:

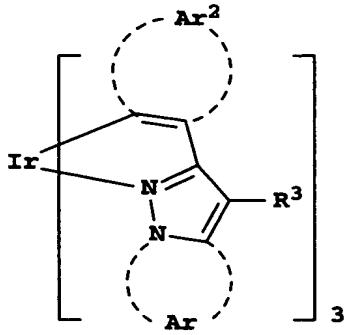
Ar represents the atoms necessary to form an aromatic ring group;

R^3 represents hydrogen or a substituent; and

Ar^2 represents the atoms necessary to form a five or six membered aromatic ring group.

16. The device of claim 15 wherein Ar and Ar^2 independently represent the atoms necessary to form a benzene ring group.

17. The device of claim 5 wherein the light-emitting material is represented by Formula (1g):



(1g)

wherein:

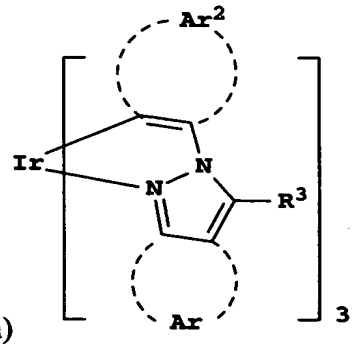
Ar represents the atoms necessary to form an aromatic ring group;

R^3 represents hydrogen or a substituent; and

Ar^2 represents the atoms necessary to form a five or six membered aromatic ring group.

18. The device of claim 17 wherein Ar and Ar^2 independently represent the atoms necessary to form a benzene ring group.

19. The device of claim 5 wherein the light-emitting material is represented by Formula (1h):



(1h)

wherein:

Ar represents the atoms necessary to form an aromatic ring group;

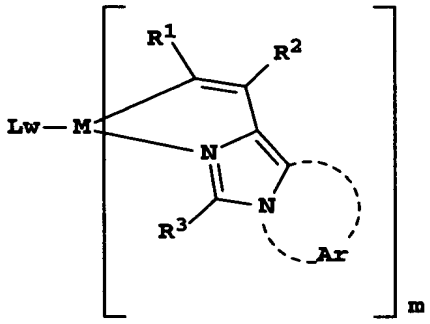
R^3 represents hydrogen or a substituent; and

Ar^2 represents the atoms necessary to form a five or six membered aromatic ring group.

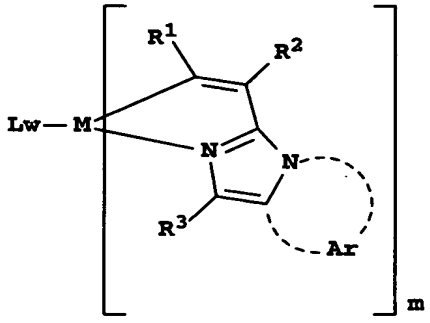
20. The device of claim 19 wherein Ar and Ar^2 independently represent the atoms necessary to form a benzene ring group.

21. The device of claim 5 wherein the light-emitting layer contains a light emitting material of Formula (1a), (1b), (1c), or (1d).

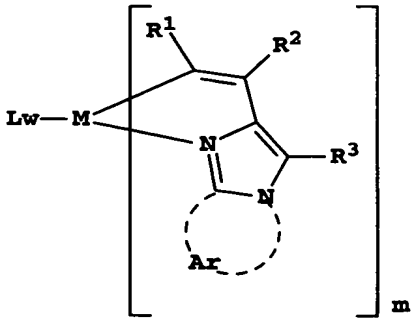
(1a)

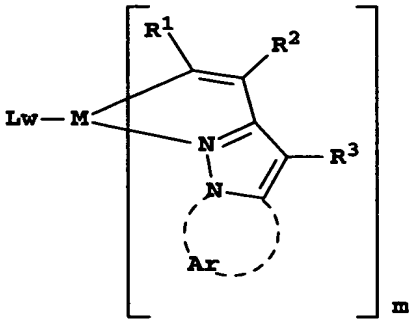


(1b)



(1c)





(1d)

wherein:

M is a coordinated metal selected from the group consisting of Ir, Rh, Pt, Os, and Pd;

m is 1, 2, or 3 when M is Ir or Rh and m is 1 or 2 when M is Pt, Pd, or Os;

L represents an independently selected ligand group;

w is 0- 4 as necessary in order to satisfy a 6 coordination sites when M is Ir, Os, or Rh and w is 0- 2 as necessary in order to satisfy 4 coordination sites when M is Pt or Pd; and

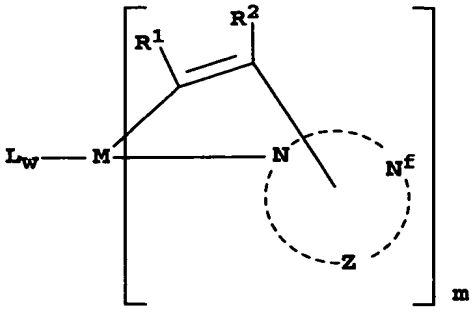
R^1 and R^2 represent substituent groups, provided that R^1 and R^2 may join to form a ring group; and

R^3 represents hydrogen or a substituent;

Ar represents the atoms necessary to form an aromatic ring group.

22. An organometallic complex comprised of: Ir, Rh, Os, Pt, or Pd and a diazole group ligand wherein the ligand has a fused aromatic ring group including a nitrogen of the diazole as a bridgehead nitrogen.

23. An organometallic complex according to claim 22 represented by Formula (1),



(1)

wherein:

Z represents the atoms necessary to form a diazole group ligand wherein the ligand has a fused aromatic ring group including a nitrogen of the diazole as a bridgehead nitrogen;

N^f represents a nitrogen atom at a bridgehead position between the diazole ring group and the fused aromatic ring group;

M is a coordinated metal selected from the group consisting of Ir, Rh, Pt, Os, and Pd;

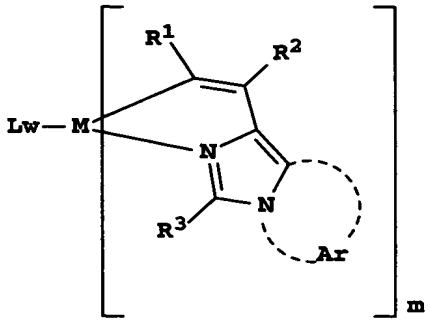
m is 1, 2, or 3 when M is Ir or Rh and m is 1 or 2 when M is Pt, Pd, or Os;

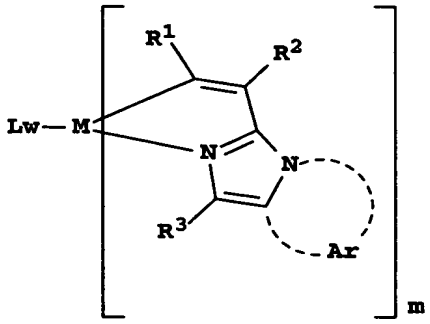
L represents an independently selected ligand group;

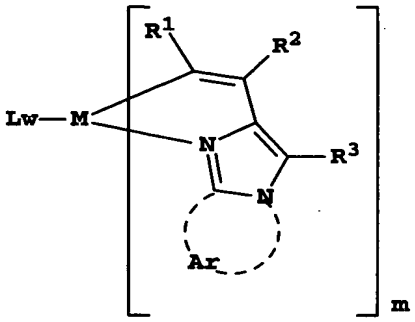
the sum of w and m is 3 when M is Ir, Rh, or Os and the sum of w and m is 2 when M is Pt or Pd; and

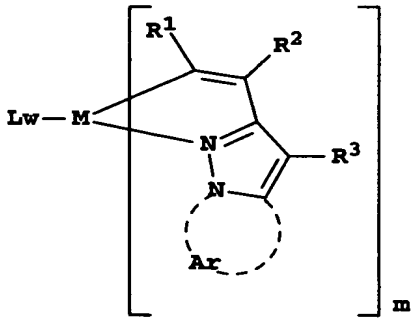
R^1 and R^2 represent substituent groups, provided that R^1 and R^2 may join to form a ring group and R^1 and R^2 may be chosen so as to fuse with the diazole ring group.

24. An organometallic complex according to claim 22 represented by Formula (1a), (1b), (1c), or (1d):

(1a) 

(1b) 

(1c) 

(1d) 

wherein:

M is a coordinated metal selected from the group consisting of Ir, Rh, Pt, Pd, and Os;

m is 1, 2, or 3 when M is Ir or Rh and m is 1 or 2 when M is Pt, Pd, or Os;

L represents an independently selected ligand group;

w is such that the sum of w and m is 3 when M is Ir, Rh, or Os and the sum of w and m is 2 when M is Pt or Pd; and

R^1 and R^2 represent substituent groups, provided that R^1 and R^2 may join to form a ring group;

R^3 represents hydrogen or a substituent; and

Ar represents the atoms necessary to form an aromatic ring group.

25. The device of claim 1 wherein the emitting material is a dopant compound disposed in a host material.

26. The device of claim 25 wherein the dopant compound is present in an amount of up to 15 wt% based on the host.

27. The device of claim 1 wherein the light-emitting material is part of a polymer.

28. The device of claim 1 including a means for emitting white light.

29. The device of claim 28 including a filtering means.

30. The device of claim 1 including a fluorescent emitting material.

31. A display comprising the OLED device of claim 1.

32. An area lighting device comprising the OLED device of claim 1.

33. A process for emitting light comprising applying a potential across the device of claim 1.